



SEQUENCE LISTING

<110> Schulein, Martin
Bjornvad, Mads

<120> Family 9 Endo-Beta-1, 4-Glucanases

<130> 5843.200-US

<160> 10

<170> PatentIn version 3.1

<210> 1

<211> 1941

<212> DNA

<213> Bacillus licheniformis

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Gln Arg Ser Gly Arg Leu Pro Glu Asn Ser Arg Leu Asn Trp Arg Gly

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gac tcc ggg ctt gag gac gga aaa gac gtt ggc ctc gat tta acg gga 240
Asp Ser Gly Leu Glu Asp Gly Lys Asp Val Gly Leu Asp Leu Thr Gly

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ggg tgg tat gat gcc ggc gac cac gtg aag ttc ggt ctg ccg atg gct 288
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55 60 65

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gcg aca gac tac ttt ctt aaa gcc cat acg gct cct tat gaa ttg tgg Ala Thr Asp Tyr Phe Leu Lys Ala His Thr Ala Pro Tyr Glu Leu Trp 100 105 110 115	432
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Trp Asn Pro Glu Asn Asp His Ser Tyr Gln Gly Leu Ser His Ala Leu	
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Ala Thr Asp Tyr Phe Leu Lys Ala His Thr Ala Pro Tyr Glu Leu Trp
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Pro Gly Ser Asp Leu Ala Gly Gly Thr Ala Ala Ala Leu Ala Ser Ala
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Ser Ile Ile Phe Lys Pro Thr Asp Ser Ser Tyr Ser Glu Lys Leu Leu
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Ala His Ala Lys Gln Leu Tyr Asp Phe Ala Asp Arg Tyr Arg Gly Lys
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Thr Glu Glu Gln Gln Tyr Leu Asp Lys Ala Leu Ala Ser Val Ser Asp
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Asp Val Thr Tyr Gly Ala Gln Leu Leu Leu Ala Arg Leu Thr Asn Asp
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Ser Arg Phe Val Lys Ser Val Glu Arg Asn Leu Asp Tyr Trp Ser Thr
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Gly Tyr Ser His Asn Gly Ser Ile Glu Arg Ile Thr Tyr Thr Pro Gly
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310 315 320

Ala Ala Phe Leu Ala Phe Val Tyr Ser Asp Trp Val Asp Thr Glu Lys
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Gly Asp Asn Pro Gln Gln Arg Ser Phe Val Val Gly Tyr Gly Lys Asn
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Pro Pro Lys His Pro His His Arg Thr Ala His Gly Ser Trp Ala Asn
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Gln Met Asn Val Pro Glu Asn His Arg His Thr Leu Tyr Gly Ala Leu
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Val Gly Gly Pro Gly Arg Asp Asp Ser Tyr Arg Asp Asp Ile Thr Asp
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Tyr Ala Ser Asn Glu Val Ala Ile Asp Tyr Asn Ala Ala Phe Thr Gly
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Asn Val Ala Lys Met Phe Gln Leu Phe Gly Lys Gly His Val Pro Leu
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Pro Asp Phe Pro Glu Lys Glu Thr Pro Glu Asp Glu Tyr Phe Ala Glu
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Phe Arg Tyr Tyr Val Asp Leu Thr Glu Ala Val Glu Ala Gly Tyr Ser
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Ser Glu Leu Lys Pro His Asp Ala Ser Lys His Ile Tyr Tyr Thr Glu
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